

WORKFORCE NEEDS FOR DISTRIBUTED SOLAR PROJECTS



Center for Energy Efficiency & Renewable Technologies

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Presented to InterSolar-North America

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THE SOLAR MECCA

CALIFORNIA AND THE US SOUTHWEST



Solar Fuel Offers Huge Potential
for the Regional Energy Economy.





The largest rooftop PV system in the US was built in 2010 in Mira Loma, California by PermaCity Solar. 3.4 MW PV System.





150kW Solar Carport Built in 2011 in El Monte, California. Cathay Bank headquarters.





11kW Building-Integrated PV in Santa Monica, California. Energy powers common areas in the multi-use residential complex.



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California Unemployment Statistics by County

July 2010

Imperial	31.30%
Kern	14.40%
Los Angeles	12.50%
Riverside	15.30%
San Bernardino	14.80%
San Luis Obispo	9.70%
Source: July 2010 Statistics CA EDD, Labor Market Information Division	

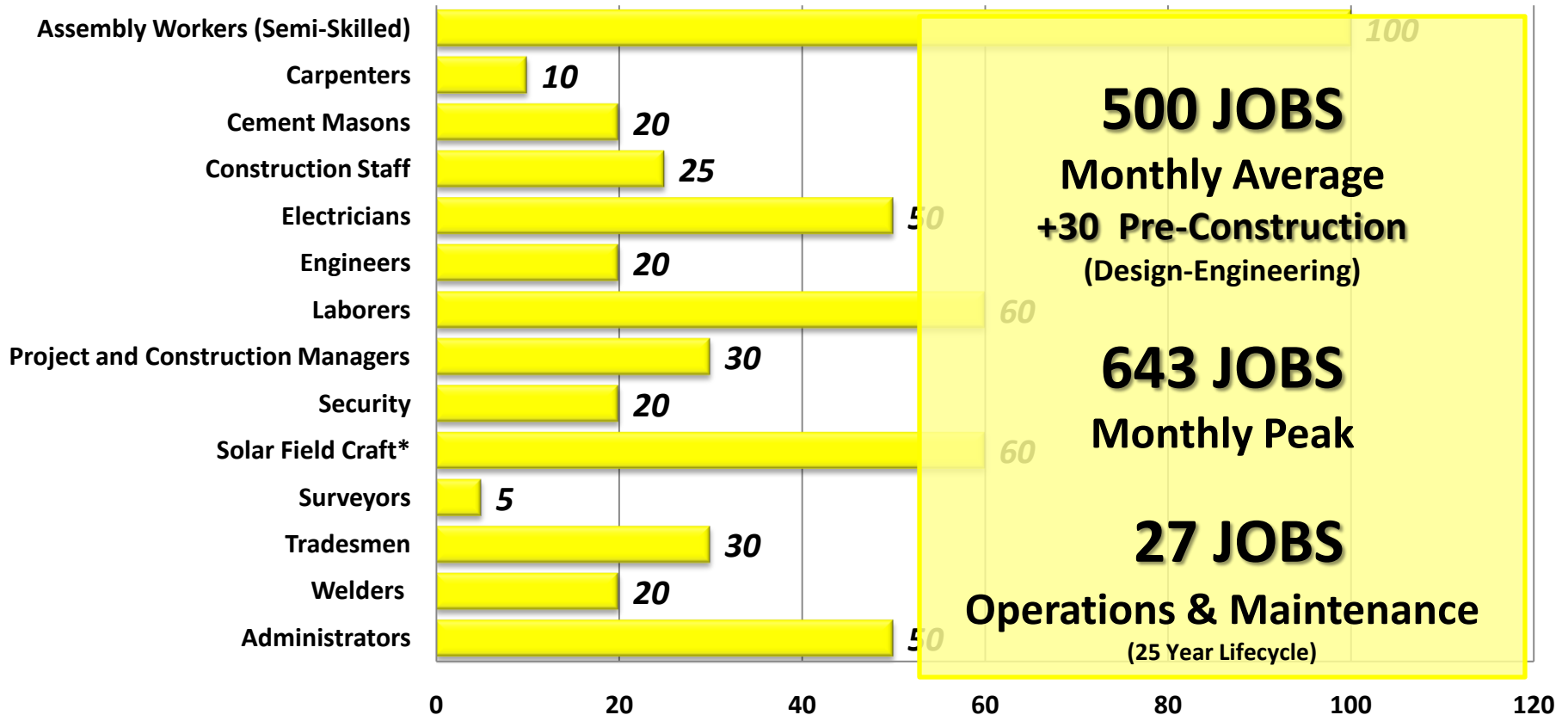


Monthly Construction Jobs Estimates

10 PV Projects - 30 MW Total

Rooftops/Carports

Length of Construction: 6 Months



**The Solar Field Craft is a CEC job category. These crews may include Foremen, Equipment Operators, Ironworkers, Carpenters, Masons, and Pipefitters and Welders.*

Source: PermaCity Solar Response, CEERT Jobs Survey



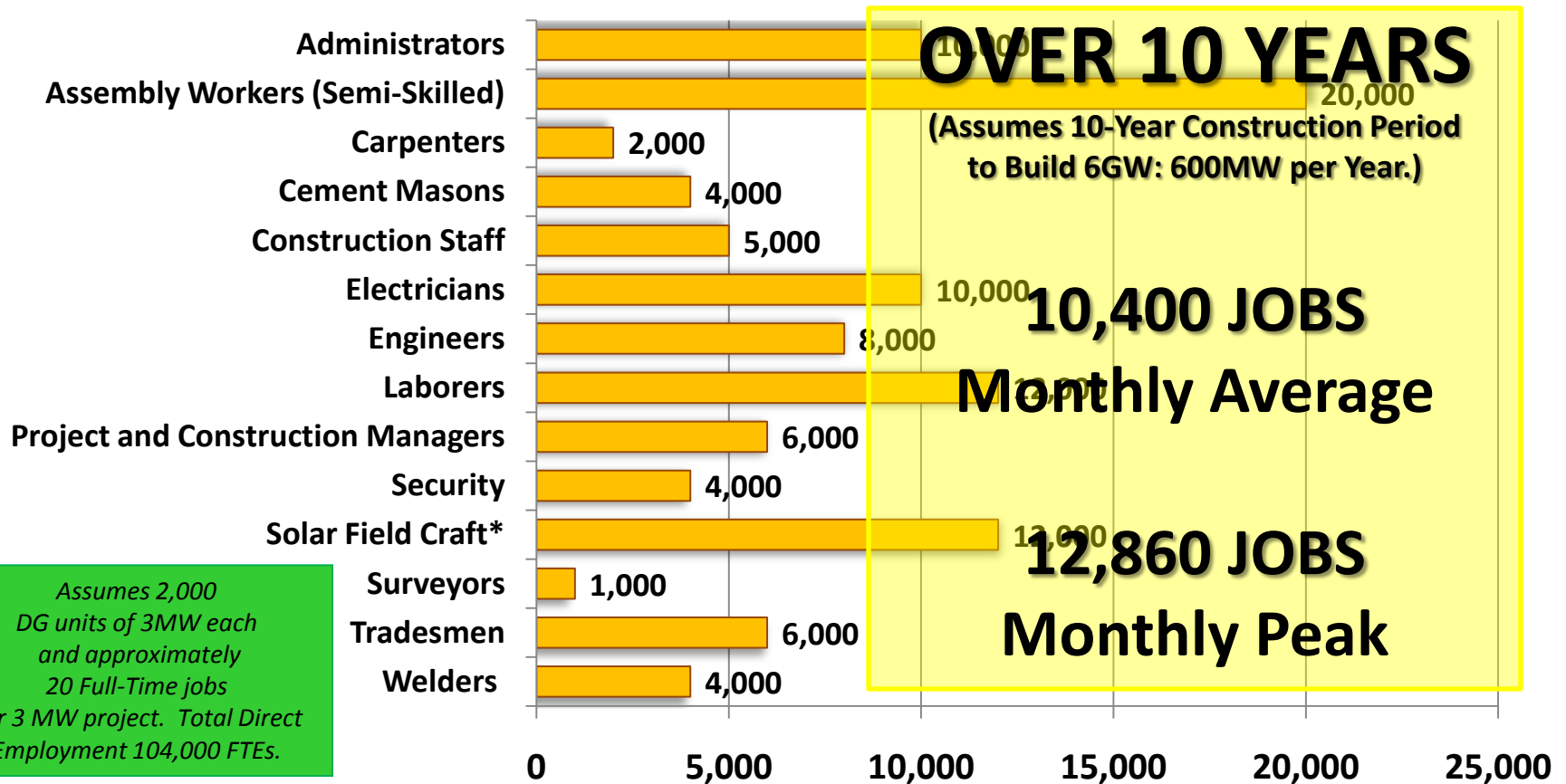
ESTIMATED ANNUAL EMPLOYEE EARNINGS & TAX RECEIPTS OVER 20 YEARS ON 30MW DISTRIBUTED PV GENERATION

CONSTRUCTION-RELATED EARNINGS <i>Year 1</i>	\$ 20.9 Million	
LIFECYCLE O&M EARNINGS <i>\$1.2M Annually Over 20 Years</i>	\$ 24 Million	
ANNUAL INDIVIDUAL INCOME TAXES <i>Paid by Employees</i>	State Federal	\$ 2 Million \$ 7.2 Million
ANNUAL EMPLOYMENT TAXES <i>Paid by Developer/Operator</i>	State (Unemployment, Other) Federal (SSI, Medicare, Fed. Income Tax)	\$ 600,000 \$ 4.3 Million
ANNUAL CORPORATE INCOME TAXES <i>Paid by Owner/Operator</i>	State Federal	\$ 180,000 \$ 690,000
PROPERTY TAXES <i>Annually Over 20 Years</i>	County, State	\$ 37,500



SUBSTANTIAL DIRECT EMPLOYMENT POTENTIAL

CONSTRUCTION JOBS TO BUILD 2,000 PV PROJECTS (6GW TOTAL DG)



Estimated Payroll Earnings On 6GW of PV Installations

\$4.2 BILLION

Construction Payroll

Estimate Based on \$2.1 Million Payroll per 3MW.
(\$2.1 Million X 2,000 3MW Systems)

\$4.8 BILLION

O&M Payroll Over 20 Years

(\$2.4 Million X 2,000 Systems Maintained Annually Over 20 Years)

\$240 MILLION

Annual O&M Earnings

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